



TIMBERTECH CLASSIC COMPOSITE SERIES AND RESERVE RAILING INSTALL GUIDE

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TimberTech Reserve Rail can be installed with a continuous Top Rail in up to 16' lengths, measured from the center of the end posts. These applications require the use of a 4" Post Sleeve, 4" Post Skirt and a 4" x4" Post as an intermediate post, as well as unique fastening procedures. This Install Guide details these unique procedures.



IMPORTANT NOTES:

- Please read all instructions completely before starting any part of the installation. Always make sure to visit www.TimberTech.com to ensure you are viewing the most current installation instructions, care and cleaning, technical information and more.
- TimberTech Railing should be installed using the same good building principles used to install wood or composite railing and in accordance with the local building codes and the installation guidelines included below.
- AZEK Co. LLC accepts no liability or responsibility for the improper installation of this product.
- TimberTech Railing may not be suitable for every application and it is the sole responsibility of the installer to be sure that TimberTech Railing is fit for the intended use. Since all installations are unique, it is also the installer's responsibility to determine specific requirements in regards to each Rail application.
- AZEK Co. LLC recommends that all applications be reviewed by a licensed architect, engineer or local building official before installation. If you have any questions or need further assistance, please call AZEK Customer Service at 877-ASK-AZEK (877-275-2935) or visit our website at www.TimberTech.com.
- TimberTech Railing is tested as a whole system and should be used that way. It is not intended to be used in conjunction with other railing systems or fasteners.
- The following Installation Guidelines are applicable for installation of TimberTech Classic Composite Series and TimberTech Reserve Rail Systems.
- **IMPORTANT:** Make sure the DRIVE TOOL/DRILL is configured or set to use the SCREW setting when driving and/or tightening all FASTENERS. It is very Important not to overdrive fasteners. The use of Impact type drill drivers can increase the risk of overdriving fasteners.
- **SAFETY:** Always wear goggles when handling, cutting, drilling and fastening materials.
- Failure to install this product in accordance with applicable building codes and TimberTech's written Railing Install Guide may lead to personal injury, affect rail system performance and void the product warranty.
- The buildup or generation of static electricity is a naturally occurring phenomenon in many plastic based products such as carpeting, upholstery, and clothing, and can occur on alternative decking under certain environmental conditions. This static electricity can discharge once contact is made with hardware, railing, or other conductors of electricity.



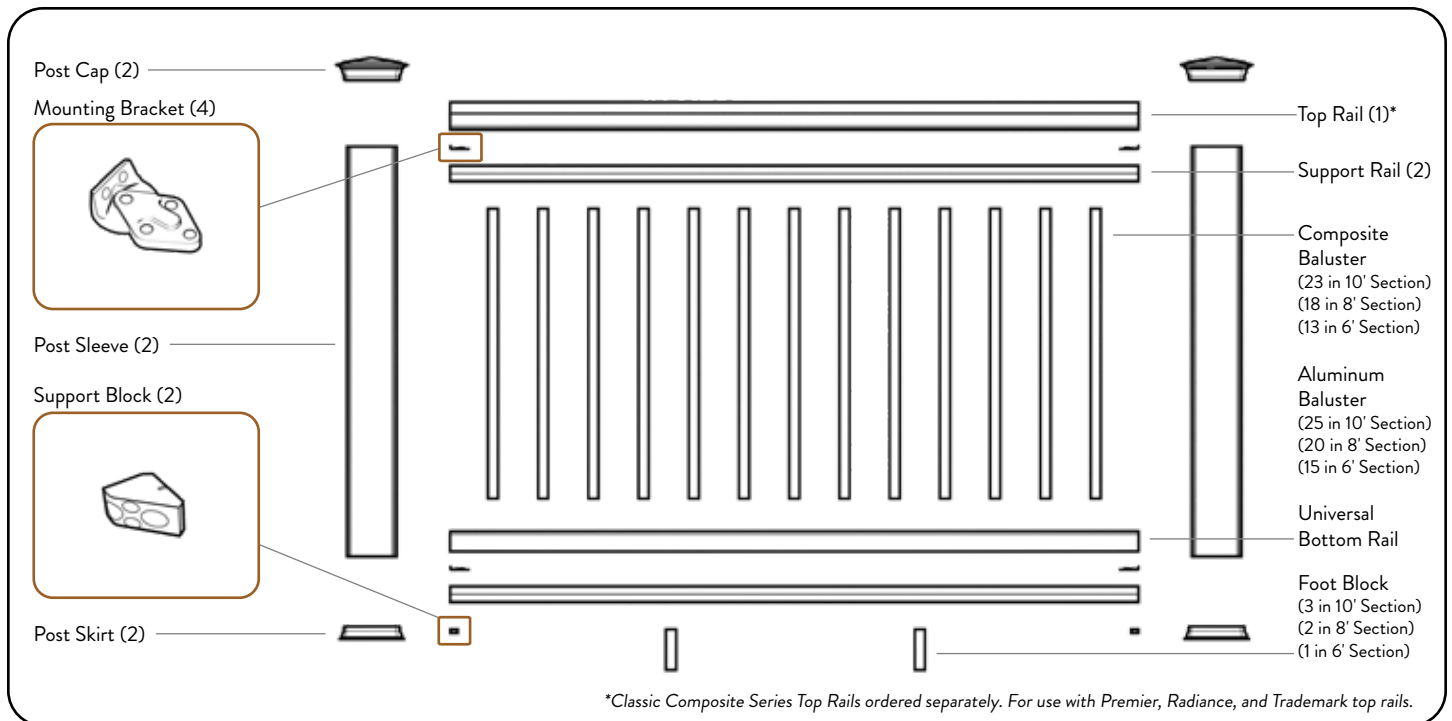
Find install videos, written instructions and a chat link at <https://www.timbertech.com/installation-help>.

NOTE: IF INSTALLING POST LIGHTING, WIRING MUST BE INSTALLED PRIOR TO SECURING POSTS TO DECK/STAIR SURFACE AND INSTALLING TOP RAILS.

It is the responsibility of the installer to meet all local code requirements and obtain all required building permits. The installer should determine and implement appropriate installation techniques for each installation situation. The AZEK Company or its reseller shall not be held responsible for improper or unsafe installations.

INSTALLING RAILING WITH BALUSTERS

FOR CLASSIC COMPOSITE SERIES AND RESERVE RAIL



This entire section of instructions is for installation of Classic Composite Series and Reserve Rail systems. Installation of the RESERVE RAIL system is identical to the Classic Composite Series, except it uses the RESERVE BOTTOM RAIL instead of the Universal Bottom Rail.



IMPORTANT NOTES:

- **Prior to construction, check with your local regulatory agency for special code requirements in your area.**
- Common railing height is 36" or 42".
- TimberTech Railing 10', 8' and 6' Rails are designed not to exceed 10', 8' and 6' from center of post to center of post, respectively.
- For all other applications, consult a design professional or a TimberTech Railing representative for more information.
- For all stair applications, maximum rail length must not exceed 91".
- If using anything other than aluminum support rail, the maximum rail length must not exceed 91".
- 4x4 lumber posts must be installed plumb and level with each other.
- Cut slowly, using a thin kerf, finish saw blade to avoid chipping.
- Read instructions completely to get an understanding of how the product goes together and how each piece affects the other.
- For all applications, a structural post must be used inside our Post Sleeve.
- Compatible with all Classic Composite Series Railing Infills.



IMPORTANT NOTES:

- Visit <https://www.timbertech.com/installation-help> to view TimberTech installation videos.
- Consult your local building codes for guard and handrail requirements.
- TimberTech Railing 10', 8' and 6' Rails are designed not to exceed 10', 8' and 6' from center of post to center of post, respectively.
- For all other applications, consult a design professional or a TimberTech Railing representative for more information. For stair applications maximum rail length must not exceed 91".
- 4x4 lumber posts must be installed plumb and level with each other.
- Cut slowly, using a thin kerf, finish saw blade to avoid chipping.
- Read instructions completely to get an understanding of how the product goes together and how each piece affects the other.
- For all applications, a structural post must be used inside our Post Sleeve.
- Compatible with all Classic Composite Series Railing Infills.

TOOLS REQUIRED

- Miter Saw
- 7/64" Drill Bit
- Measuring Tape
- Drill
- 3/16" Drill Bit
- Caulk Gun

COMPONENTS NEEDED FOR INSTALLING ONE TIMBERTECH RAIL SECTION

(TOP RAIL NOT INCLUDED IN CLASSIC COMPOSITE SERIES)

Components needed to complete install of 10', 8', and 6' rail sections

1 Universal Rail Kit = 1 Universal Rail Pack + 1 Baluster Pack

Kits only available in 36" height.

- 1 - Top Rail (Sold Separately)
- 1 - Universal Bottom Rail
- 2 - Support Rails (1 - Aluminum Top Support Rail for 10')
Foot Blocks (1 in 6' Kits, 2 in 8' Kits, 8 in 10' Kits)
- Composite Balusters (13 in 6' Kits, 18 in 8' Kits, 23 in 10' Kits)
- Hardware Mounting Kit
- Support Block Mounting Templates
- Baluster Fastener Kit
- 2 - Post Caps (Sold Separately)
- 2 - Post Sleeves (Sold Separately)
- 2 - Post Skirts (Sold Separately)

Components available separately for mix-and-match rail systems

*Order Custom Universal Rail Packs-Laser Etched for Aluminum Balusters, CableRail, or Glass Infills

- (Top Rails sold separately)
- 1 - Universal Bottom Rail (with Classic Composite Series)
- 2 - Support Rails (1 - Aluminum Top Support Rail for 10')
- Hardware Mounting Kit
- Support Block Mounting Templates
- Foot Blocks (1 in 6' Packs, - 2 in 8' Packs, - 3 in 10' Packs)

- | Composite Balusters | Aluminum Balusters |
|--|--|
| - 18 Balusters per Pack
(23 required per 10' section)
(18 required per 8' section)
(13 required per 6' section) | - 20 Balusters per Pack
(25 required per 10' section)
(20 required per 8' section)
(15 required per 6' section) |
| - 29" for 36" Railing
(with less than 2" gap between deck & Bottom Rail) | - 29" for 36" Railing
(with less than 2" gap between deck & Bottom Rail) |
| - 31" for 36" Railing
(with less than 2" gap between deck & Bottom Rail) | - 31" for 36" Railing
(with less than 2" gap between deck & Bottom Rail) |
| - 35" for 42" Railing
(with less than 2" gap between deck & Bottom Rail) | - 35" for 42" Railing
(with less than 2" gap between deck & Bottom Rail) |
| - 37" for 42" Railing
(with less than 2" gap between deck & Bottom Rail) | - 37" for 42" Railing
(with less than 2" gap between deck & Bottom Rail) |

- | Baluster Fastener Kit | Baluster Fastener Kit |
|-----------------------|-----------------------|
| 18 - #8x2" Screws | 20 - #8x2" Screws |
| 18 - #8x3" Screws | 20 - #8x3" Screws |

Hardware included in Hardware Mounting Kits:

- 4 - Mounting Brackets
- 2 - Support Blocks
- 16 - #8 x 3/4" Screws
- 6 - #8 x 1 5/8" Screws
- 6 - #8 x 2 5/8" Screws (Stairs Only)
- 6 - #8 x 3" Screws
- 12 - #8 x 3" Semi-threaded Screws
- T20 Driver Bit

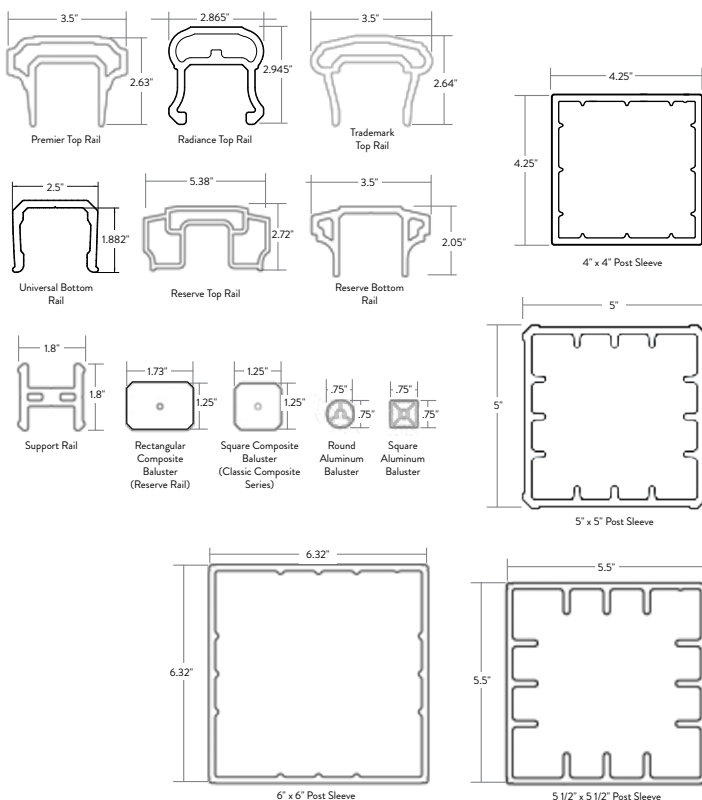
Additional Components Needed for Each System (Sold Separately)

- 1 - Top Rail
- 2 - Post Caps
- 2 - Post Sleeves
- 2 - Post Skirts

MEASURING YOUR RAILING AREA

- Measurements are from center to center of the posts. Rails are produced in 10', 8' and 6' to allow for finished end cuts and angles.
- Determine how many 10', 8' and 6' TimberTech Rail Sections you need and check to be sure you have all the components (and quantities) listed in the chart shown.

COMPONENT DIMENSIONS

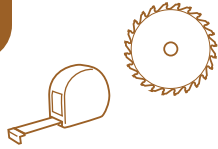


INSTALLING RAILING WITH BALUSTERS

FOR CLASSIC COMPOSITE SERIES AND RESERVE RAIL



1



IMPORTANT NOTES:

Be sure to cut Post Sleeves such that finished rail height is at least 36" high for a 36" rail application and 42" high for a 42" application.

For all rail installations, post and post covers must be plumb and aligned with one another.

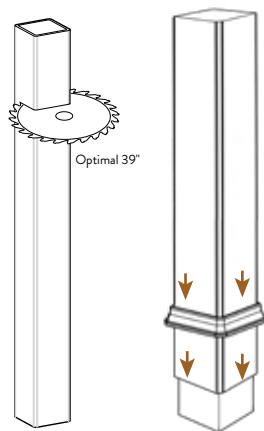
For Over-the-Post applications, it is critical that Posts be of a consistent height (e.g. the tops of all post sleeves are level and on plane with each other).

TIP: To ensure that the tops of all post sleeves are level, you may use a traditional 8 ft. level or a string line to establish a common level across all post sleeves and cut at that level. Alternatively, you may use a laser level to "shoot" a level mark on each post sleeve and then cut at that mark.

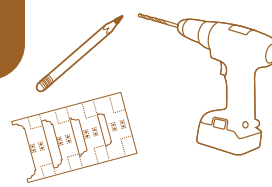
39" above deck surface is optimal for 36" railing heights.

INSTALL POST SLEEVES

- Trim Post Sleeves to desired length.
- Slide Post Sleeves and Post Skirt over post (do not force). Post sleeve will be slightly larger than the post.
- Ensure posts are square and plumb. Shim as needed to plumb.



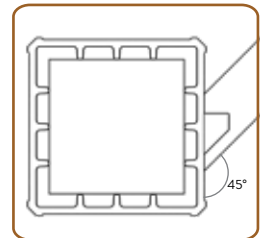
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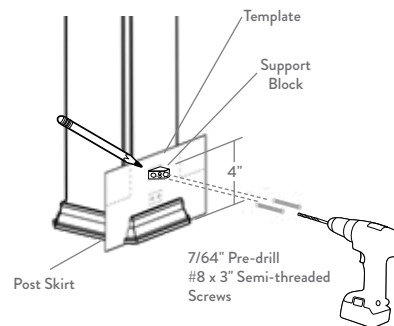
INSTALL LOWER SUPPORT BLOCKS

- Position template at bottom of Post Sleeve above Post Skirt.

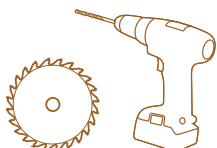
If you do not have the template, position the top of the Support Block 4" above the deck.



For angled rail installations, align angled face of Support Block parallel to rail section.



3



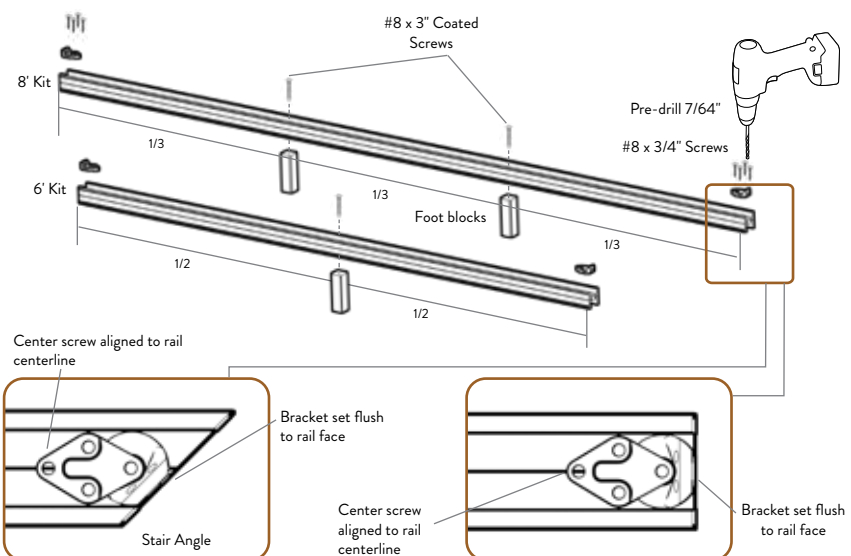
For sections up to 6': Place one Foot Block in the center of the rail.

For sections 6' to 8': Space two Foot Blocks approximately at 1/3 intervals on the rail.

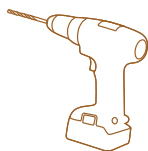
For sections 8' to 10': Space three Foot Blocks approximately at 1/4 intervals on the rail.

CUT AND ASSEMBLE BOTTOM SUPPORT RAIL

- Cut the Bottom Support Rail to length.
- Add support blocks as required.
- Attach brackets.

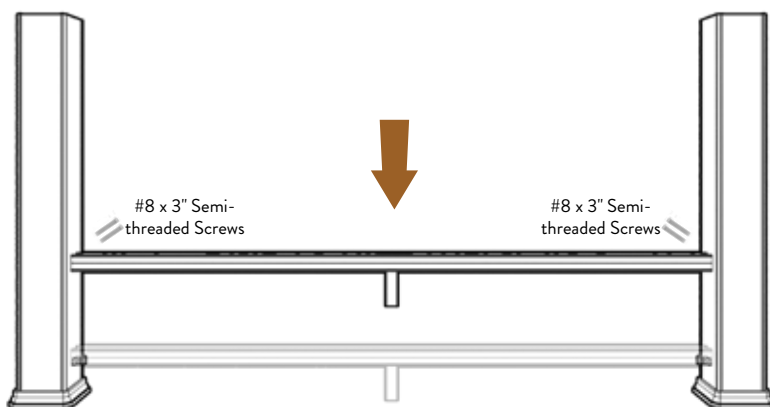
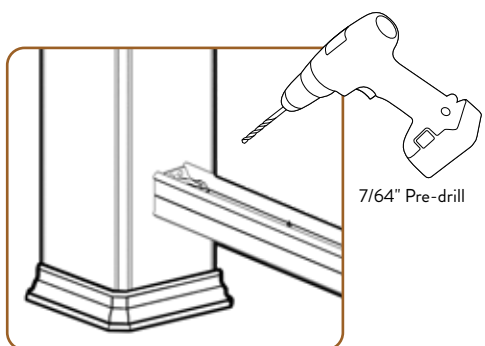


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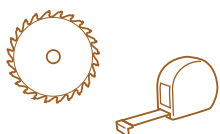


INSTALL BOTTOM SUPPORT RAIL

- Position Bottom Support Rail assembly onto Support Blocks.
- Pre-drill holes into post sleeves only.
- Attach brackets with green coated screws.



5

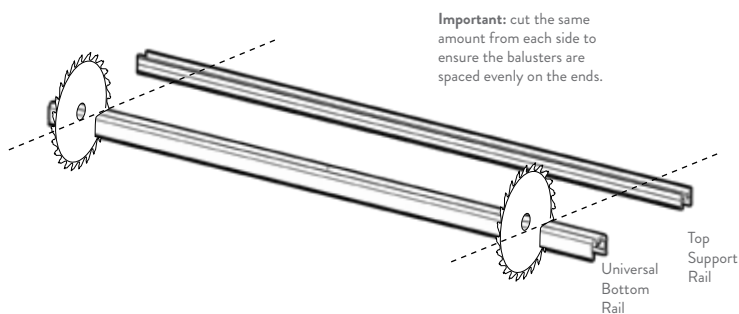
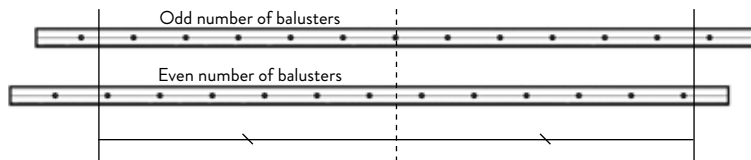


SPACE BALUSTER AND TRIM RAILS

- Measure distance between the posts at the Bottom Support Rail.
- Transfer measurement to Universal Bottom Rail. To prevent end balusters from interfering with the post sleeves, center either on a pre-drilled hole, or between two pre-drilled holes (see diagram below).
- Cut Universal Bottom Rail and Top Support Rail to length.



The space between the end baluster and post can not exceed 4"



INSTALLING RAILING WITH BALUSTERS

FOR CLASSIC COMPOSITE SERIES AND RESERVE RAIL



6

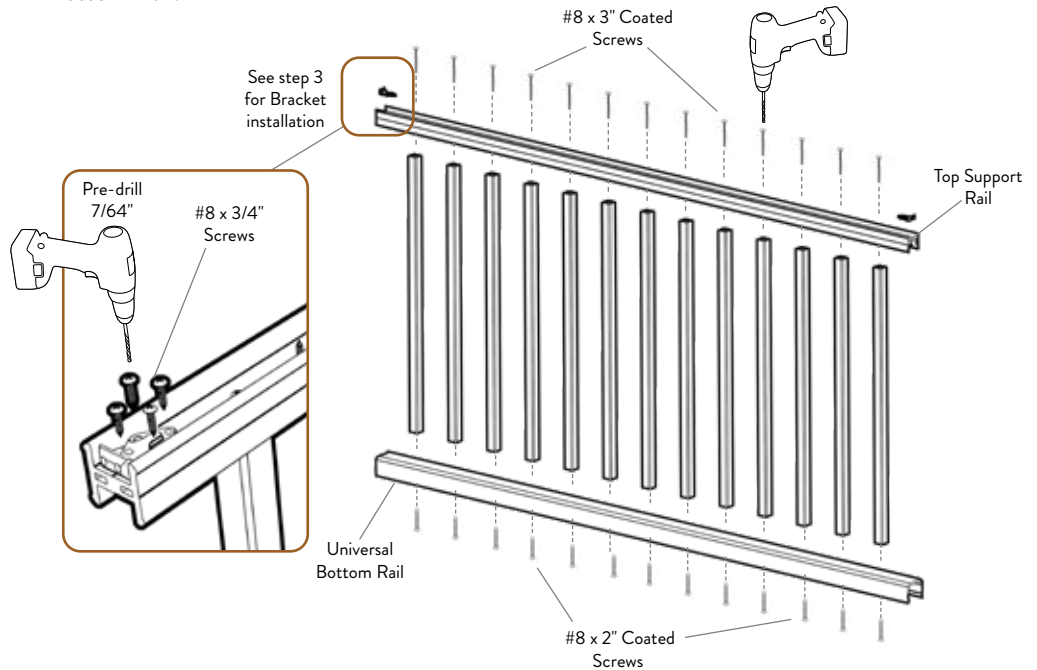


ASSEMBLE BALUSTER SECTION

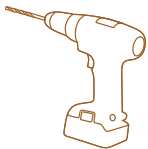
- Attach Mounting Brackets at each end of the Top Support Rail (outlined in Step 3).
- Attach balusters using pre-drilled holes starting with the support rail and then the Universal Bottom Rail.



For 10' rail sections utilizing aluminum support rail, when attaching Mounting Brackets at each end of the Top Support Rail, pre-drill using a 9/64" drill bit (instead of 7/64" bit).



7

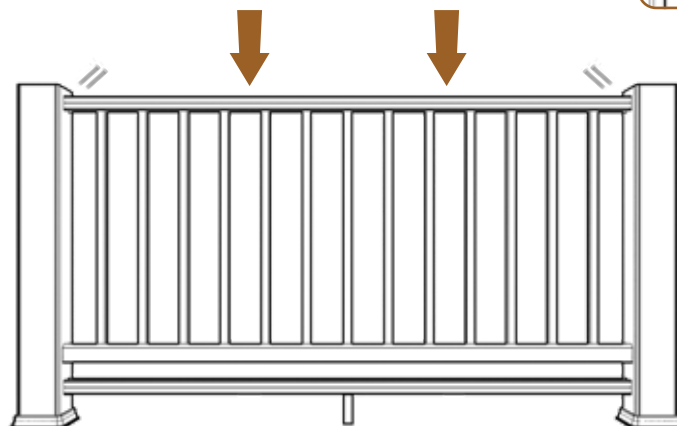
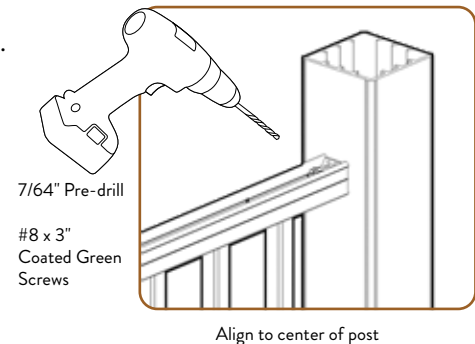


INSTALL RAIL ASSEMBLY

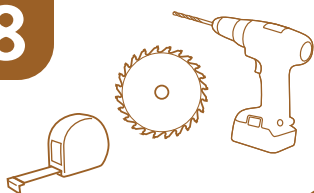
- Place finished section on Bottom Support Rail.
- Align Top Support Rail to center of Posts.
- Attach brackets on Top Support Rail to posts.



NOTE: If installing a Deck Board as a Top Rail, please refer to Drink Rail Install Guide.

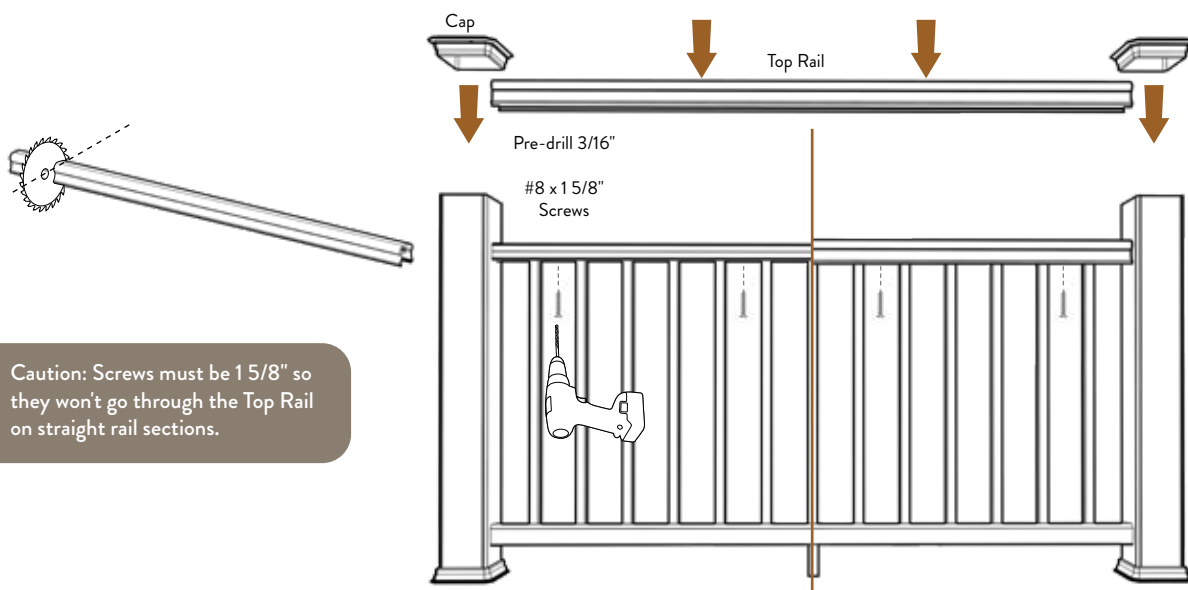


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INSTALL TOP RAIL AND POST CAPS

- Measure and cut Top Rail (not included) to length. Trim both ends for a clean cut. If installing Deck board as Drink Rail, please refer to Drink Rail Install Guide
- **Important:** Pre-drill 3/16" holes through the top support rail as illustrated below.
- Attach Top Rail using 1 5/8" screws, driving screws up through bottom of support rail into Top Rail.
- Attach Post caps using exterior grade caulk applied to the underside of the cap.

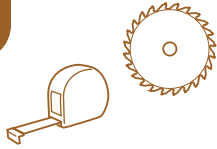


INSTALLING STAIR RAILING WITH BALUSTERS

FOR CLASSIC COMPOSITE SERIES AND RESERVE RAIL



1



IMPORTANT NOTES:

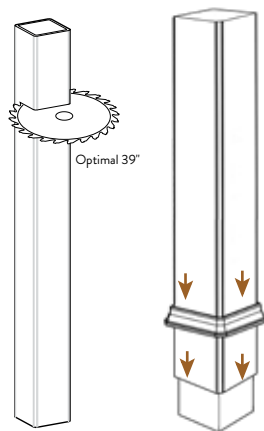
Be sure to cut Post Sleeves such that finished rail height is at least 36" high for a 36" rail application and 42" high for a 42" application.

For all rail installations, post and post covers must be plumb and aligned with one another.

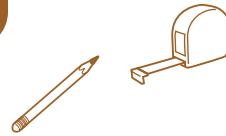
For Over-the-Post applications, it is critical that Posts be of a consistent height (e.g. the tops of all post sleeves are level and on plane with each other).

INSTALL POST SLEEVES

- Trim Post Sleeves to desired length.
- Slide Post Sleeves and Post Skirt over post (do not force). Post sleeve will be slightly larger than the post.
- Ensure posts are square and plumb. Shim to plumb as needed.



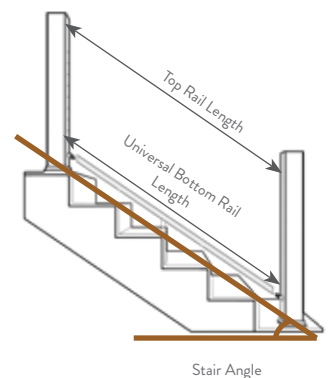
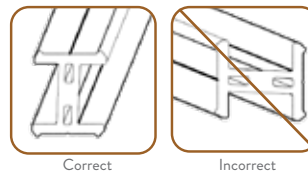
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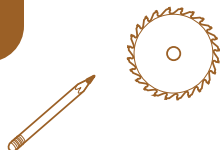
Support Rails are rotated 90° for stair rail applications.

MEASURE SUPPORT RAILS

- Determine measurements and angle as shown.
- Trim both the Top Support Rail and the Bottom Support Rail to those dimensions.
- Test fit rails to check for accuracy.



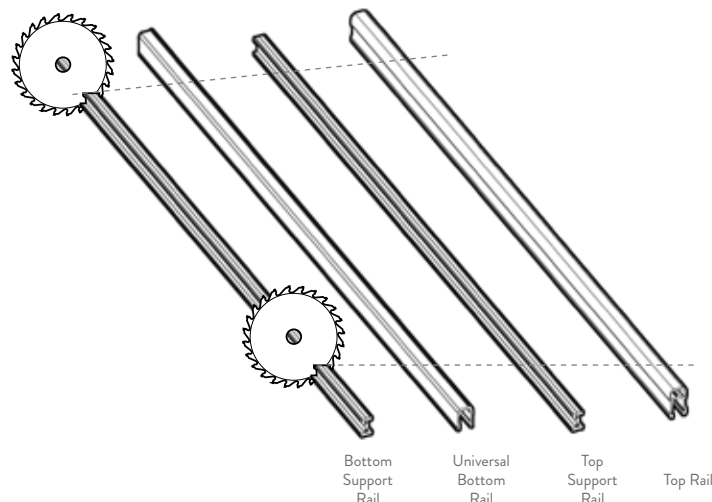
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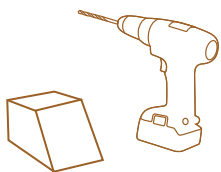
This entire section of instructions is for installation of Classic Composite Series and Reserve Rail systems. Installation of the RESERVE RAIL system is identical to the Classic Composite Series, except it uses the RESERVE BOTTOM RAIL instead of the Universal Bottom Rail.

TRIM RAILS

- Transfer measurement from Bottom Support Rail to Universal Bottom Rail.
- Trim Top Rail to match Top Support Rail at appropriate angle.

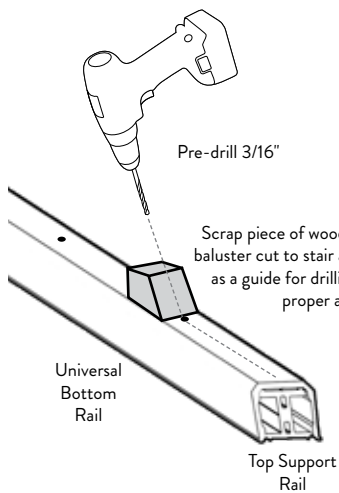


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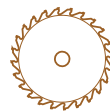


DRILL BALUSTER HOLES

- Place the Universal Bottom Rail and the Top Support Rail together as shown to keep the holes aligned.



5



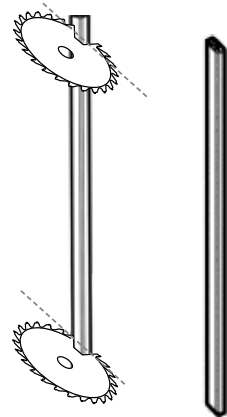
TRIM BALUSTERS

Trim Baluster ends to required angle as shown.

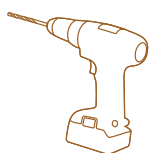
Important: Start cut at top edge to maximize the length.

Aluminum stair Balusters are pre-cut to a stair angle and are not to be cut on the job site.

- Trim TOP of Foot Block to stair angle as well.



6



ASSEMBLE BALUSTERS

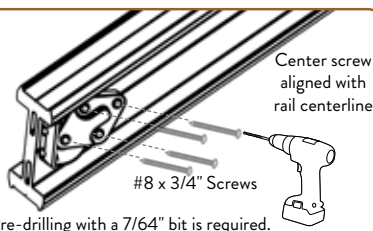
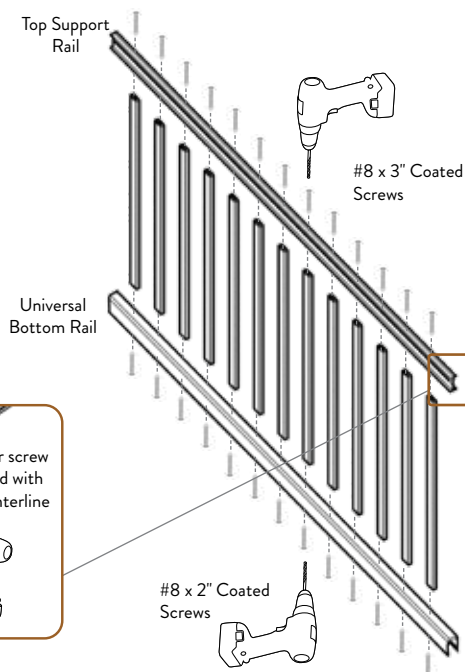
- Attach Balusters to Top and Bottom Support Rails and attach Brackets to Top Support Rail.



Tip for Universal Bottom Rail: Partially drive screws into all Balusters before driving them in completely.



Brackets must be on the side of the rail facing the stairs.

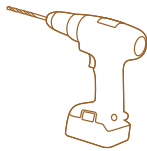


Note: Pre-drilling with a 7/64" bit is required.

INSTALLING STAIR RAILING WITH BALUSTERS FOR CLASSIC COMPOSITE SERIES AND RESERVE RAIL



7



INSTALL BOTTOM SUPPORT RAIL

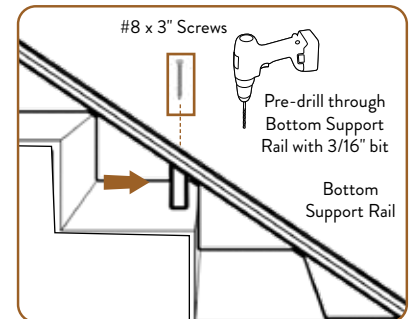
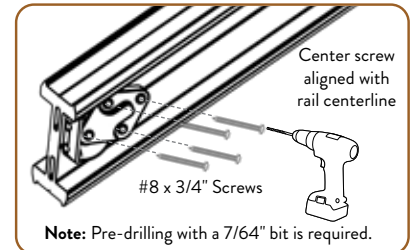
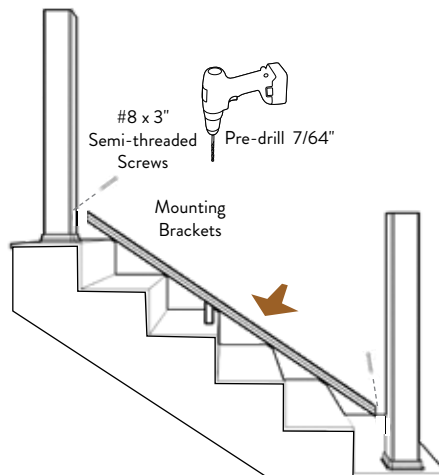
- Attach Mounting Brackets to Bottom Support Rail.
- Secure Mounting Brackets to posts.
- Wedge Foot Block under Support Rail & Attach.



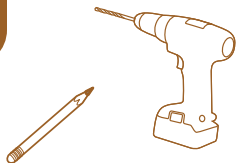
Brackets must be installed to the stair tread side of the rail.

For sections up to 6': Place one Foot Block in the center of the rail.

For sections 6' to 8': Space two Foot Blocks approximately at 1/3 intervals on the rail.

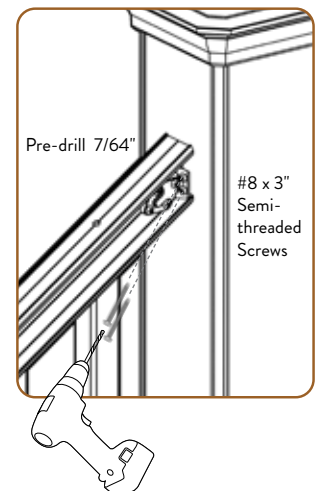
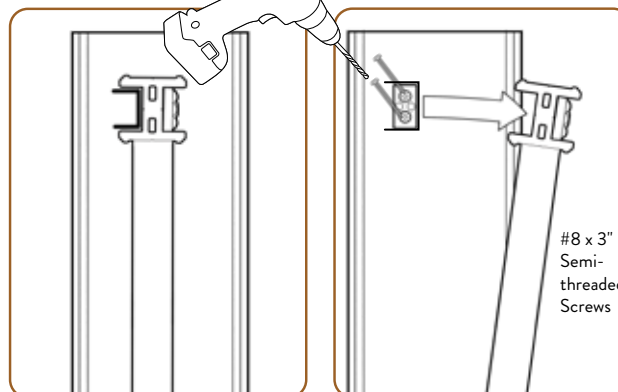
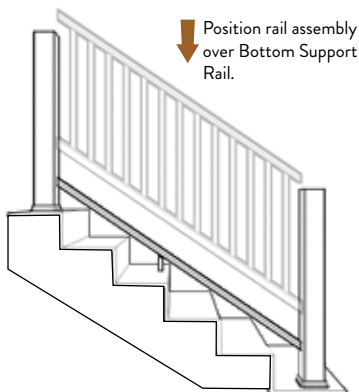


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INSTALL RAIL ASSEMBLY

- Mark ends of support rail for position of support block.
- Rotate Rail assembly out of way to fasten Support Block.
- Secure Mounting Brackets to Posts.



NOTE: If installing a Deck Board as a Top Rail, please refer to Deck Rail Install Guide.

9



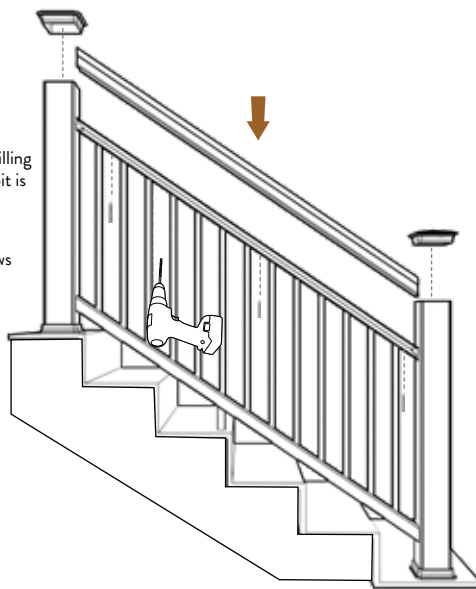
INSTALL TOP RAIL AND POST CAPS

- If installing Deck board as Drink Rail, please refer to Drink Rail Install Guide
- Attach Top Rail using 2 5/8" screws, driving screws up through bottom of support rail into Top Rail.
- Attach Post caps using exterior grade caulk applied to the underside of the cap.



For typical stair angles, use provided 2 5/8" Screws to fasten the Top Rail.

Note: Pre-drilling with a 3/16" bit is required.
#8 x 2 5/8" Coated Screws



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by AZEK Building Products

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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AZEK Building Products
1330 W Fulton Market, Suite #350
Chicago, IL 60607
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